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**III - Neon**  
TOPICS  
1) Mutagenicity Evaluation and Bioassay-Guided Studies of  the Leaf Extract of *Lagerstroemia speciosa* ("Banaba")  
          
2) Phytochemical Screening and Toxicity Studies from the Leaf Ethanolic Extract of *Carica papaya* L (“Papaya")  
  
3) Antimicrobial and Anti-inflammatory Studies of the Leaf Extracts from *Quisqualis indica* ("Niog-niogan")  
  
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Rationale 1:

MUTAGENICITY EVALUATION AND BIOASSAY-GUIDED STUDIES OF THE

LEAF EXTRACT OF *Lagerstroemia speciosa* ("Banaba")

        *Lagerstroemia speciosa* commonly known as “Banaba” has been found to have a variety of uses as a medicinal plant. To a certain extent of this scientific curiosity, it is esteemed to do auxillary inquiry and certification by scientific basis to which the mentioned plant is under study. This study aims to phytochemically screen the possible bioactive components present in the crude ethanolic extract from the leaves of *Lagerstroemia speciosa,* to investigate the effect of the sample on the number of dead *nauplii* using Brine-Shrimp Lethality Assay, to perform antimicrobial studies using Paper Disc Diffusion Method and to evaluate the leaf extract for antimutagenic activity against Methy Methane Sulfonate (MMS) through comparison of their effects of MMS using Peripheral Micronucleus Test.  
  
  
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Rationale  2:

        PHYTOCHEMICAL SCREENING AND TOXICITY STUDIES OF THE LEAF

ETHANOLIC EXTRACT FROM *Carica papaya* L.  (“Papaya”)

        Prevention and control of diseases is a global problem, which is particularly severe in developing countries where there still desperate needs for adequate health care facilities. The use of medicinal plants is very valuable in answering this need. Fortunately tropical countries are blessed with good climate for the growth of these kinds of plants including papaya. Although papaya is a fruit, but its leaves are use as herbal medicine.  
        Although the process of developing herbal medicine is very long and tedious, establishing its toxic properties is often the first thing that needs to be studied to determine its potential drug. And by finding out if the leaf extracts of the plant has bioactive components, the validity of its medicinal value as claimed by folkloric medicine can be verified. This study aims to do screen for the presence of possible bioactive components, of *Carica papaya* L.  and to determine the toxicity of the samples.  
  
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Rationale 3:

ANTIMICROBIAL AND ANTI-INFLAMMATORY STUDIES OF THE LEAF EXTRACTS

FROM *QUISQUALIS INDICA* ("Niog-niogan")

          
Throughout the ages, people have turned for healing to herbal medicine, the sixth field of alternative medicine. All cultures have folk medicine traditions that include the use of plants and plant products. Despite their overwhelming popularity and long history, we know relatively little about the safety and effectiveness of herbal remedies. Scientific study should make these remedies far safer and more effective in the future.  
  
*Quisqualis indica or commonly known as*  Niog-niogan has been found to have a variety of uses as medicinal plant from folkloric beliefs. It is found throughout the islands and provinces of the Philippines found  almost everywhere in the region.